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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,762	11/27/2001	Shinsuke Takahashi	Q67342	7568

7590 11/04/2003
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

COHEN, AMY R

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,762

Applicant(s)

TAKAHASHI, SHINSUKE

Examiner

Amy R Cohen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,5 and 7 is/are allowed.
- 6) ☒ Claim(s) 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leckey et al. (U. S. Patent No. 3,427,723) in view of Moore (U. S. Patent No. 5,154,003) and in view of Deeren (U. S. Patent No. 2,353,813).

Leckey et al. discloses a peripheral surface shape measuring apparatus (Figs. 6 and 7) of a roll-like object which measures a peripheral surface of a roll-like object (68), comprising: a displacement amount measuring device (60) which has a pinching device including two arms (76, 78) connected together at first end portions and that pinches the roll-like object in a diameter direction of the roll-like object (Figs. 6 and 7) with a sensor part (86) and a reference point part (80) arranged opposite to each other in second end portions of the two arms (Fig. 7), and which measures a displacement amount when the sensor part is relatively displaced in the diameter direction with respect to the reference point part (Col 6, lines 21-44); a rail (62) which is arranged along the axial direction of the roll-like object (Fig. 6); and a moving device (60) which supports the displacement amount measuring device and moves on the rail, wherein the peripheral surface shape of the roll-like object is measured on the basis of the displacement amount of the sensor part accompanied by movement of the displacement amount measuring device (Col 6, lines 21-44).

Leckey et al. discloses the peripheral surface shape measuring apparatus of the roll-like object wherein the sensor part and the reference point part are shaped like bars (88 and 84, respectively) which are perpendicular to the axial direction of the roll-like object and are parallel to each other (Fig. 7).

Leckey et al. does not disclose a peripheral surface shape measuring apparatus comprising a connection hinge at first ends of the two arms; a plate having a length from one end side of the roll-like object to another end side of the roll-like object in an axial direction of the roll-like object; a pair of parallel bars which are arranged along the axial direction of the roll-like object on a surface of the plate facing to the roll-like object, wherein when the peripheral surface shape of the roll-like object is measured, the pair of parallel bars are in contact with a peripheral surface of the roll-like object.

Moore discloses a peripheral surface shape measuring apparatus (10) comprising a connection hinge (16) at first ends of each of two arms (12, 14) for measuring the diameter of a roll-like object (44) (Fig. 3B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the peripheral surface measuring apparatus of Leckey et al. to replace the connection at the first end of the two arms (60) with a hinge, as taught by Moore, so that the peripheral surface shape measuring apparatus would more quickly adjust to roll-like objects of differing diameters (in contrast to adjusting the second ends of the two arms of Leckey et al.).

Deeren discloses a peripheral surface shape measuring apparatus (Fig. 1) comprising a plate (10) having a length from one end side of the roll-like object (16) to another end side of the roll-like object in an axial direction of the roll-like object (Fig. 1); a pair of parallel bars (14, 15) which are arranged along the axial direction of the roll-like object on a surface of the plate facing

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to the roll-like object, wherein when the peripheral surface shape of the roll-like object is measured, the pair of parallel bars are in contact with a peripheral surface of the roll-like object (Col 1, lines 26-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the peripheral surface shape measuring apparatus of Leckey et al. and Moore to replace the upright portions (72 and 74) with a plate and parallel bars, as taught by Deeren, so that the support for the roll-like object would be in contact with the roll-like object the length of the roll-like object, further ensuring an accurate measurement.

Regarding the range with respect to the diameter direction: Leckey et al. discloses a peripheral surface shape measuring apparatus with a range with respect to the diameter direction but does not disclose a particular value for this parameter. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a range of $\pm 5\text{mm}$ with respect to the diameter direction in a plane perpendicular to the diameter direction, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the peripheral surface shape measuring apparatus to measure within $\pm 5\text{mm}$ with respect to the diameter direction since Leckey et al. discloses the need for accurate measurements (Col 2, line 56-Col 3, line 40).

Allowable Subject Matter

3. Claims 1, 3, 5, 7 are allowed.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

The prior art does not disclose or suggest a peripheral surface shape measuring apparatus of a roll-like object which measures a peripheral shape of a roll-like object, comprising: a pair of jacking devices to be engaged on each side of a core of the roll-like object, wherein the pair of jacking devices adjust so that inclination of the casing with respect to the core of the roll-like object is eliminated in combination with the remaining limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed 08 October 2003 have been fully considered but they are not persuasive.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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Replacing the connection of the first ends of the measuring apparatus of Leckey et al. and the need to adjust the second ends of the two arms to accommodate roll-like objects of differing diameters with the hinge connection at the first end of the two arms, of Moore, reduces the time needed to adjust the measuring apparatus.

Conclusion

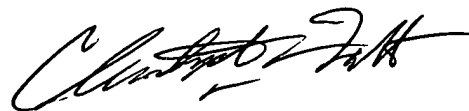
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose measuring devices of roll-like objects Svitkin et al. (U. S. Patent No. 6,568,096), Rollier et al. (U. S. Patent No. 6,463,669), Nelson et al. (U. S. Patent No. 6,427,353), Wacke (U. S. Patent No. 6,041,512), Ota et al. (U. S. Patent No. 5,230,157), Possati et al. (U. S. Patent No. 5,086,569), and Moss (U. S. Patent No. 2,609,609).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R Cohen whose telephone number is (703) 305-4972. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (703) 308-3875. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

ARC
October 29, 2003



Diego Gutierrez
Supervisory Examiner
Tech Center 2800

**CHRISTOPHER W. FULTON
PRIMARY EXAMINER**